M A R Y L A N D

Office Locations:
Annapolis, Baltimore, College Park, Hagerstown, Rockville, Salisbury

MARYLAND TECHNOLOGY EXTENSION SERVICE (MTES) Serving firms throughout Maryland. Established in 1994 and affiliated with the University of Maryland. Contact: James Key, Potomac Building 092, Room 2106, University of Maryland Engineering Research Center, College Park, MD 20742, (301) 405-3903, Fax: (301) 403-4105, Email: jk98@umail.umd.edu, Website: http://www.erc.umd.edu/

COMPANY CLIPS

Dovco Industrial Fabricators Puts Workplace Health And Safety First

Dovco Industrial Fabricators, Inc., located in Baltimore, is a job shop fabricator of large weldments and structural steel components such as bridge girders, building trusses, and equipment foundations. The company employs 50 people and has been at its present location for about 10 years. The Maryland Occupational Safety and Health Administration (MOSHA) gave Dovco Industrial Fabricators a citation at its last inspection for a noncompliant paint spray area. MOSHA suggested that Dovco contact the Maryland Technology Extension Services (MTES) for help bringing its facility to compliance. MTES has a good working relationship with MOSHA and has handled many referrals for technical assistance from the organization over the years.

MTES met with Dovco to evaluate the existing conditions. Dovco fabricates very large pieces that are not easily moved or put into a booth for painting. Large overhead cranes are the only feasible means of handling these fabrications, which prohibits the use of any conventional spray booth equipment. MTES researched alternatives to spray booths, and how other companies in similar situations solved this dilemma. The major concern is to maintain nonflammable partitions between the spray area and any sources of electric sparks within 20 feet of the spray area to minimize the potential for combustion. MTES helped Dovco build removable partitions that can be placed around the fabrication while painting it to provide a barrier between it and any spark producing equipment. The company also interlocked the crane controls with the paint spray equipment to eliminate the possibility of the cranes operating overhead during the painting, thereby increasing the overall safety of the operation.

Continued

THE MANUFACTURING EXTENSION PARTNERSHIP IN MARYLAND

Manufacturing Extension Partnership (MEP) is a nationwide system of services and support for smaller manufacturers to become more globally competitive. At the heart of the system is a network of affiliated, locally-based manufacturing extension centers. Each center, like MTES, is a partnership, typically involving federal, state, and local governments; industry; educational institutions; and other sources of expertise, information and funding support.

STATE STATS

DATA* COVERS JANUARY TO DECEMBER 2001

Number of projects completed
127

Number of firms served
143

Number of firms served for the first time
69

Federal cost share for current operating year
$401,000

State/other cost share for current operating year
$802,000

**Data as reported from center*

DATA** COVERS JANUARY TO DECEMBER 2001

Increased sales & retained sales
$17,178,000

Client capital investment
$1,646,700

Total cost savings
$15,527,500

Jobs (created & retained)
126

***Source: Independent client impact survey*

For additional information, contact Dede McMahon 301-975-5020

Orion Safety Products Streamlines Production To Eliminate Bottlenecks

Orion Safety Products, established in 1920, is located in Easton and employs 70 people. The company manufactures road flares and has annual sales between $20 and $25 million. Orion Safety Products requested assistance from the Maryland Technology Extension Service (MTES) identifing ways to reduce the amount of work-in-process (WIP) left on the production floor at the close of the day, eliminate bottlenecks on the production floor, and decrease unnecessary material handling.

MTES discussed processes and problems with company personnel, reviewed production data, and toured the facility, analyzing conditions in the production process that cause Orion's problems. After a thorough analysis, MTES presented the company with a set of recommendations. MTES suggested that Orion set the target production volume to keep pace with the slowest process, thereby avoiding the bottlenecks generated by faster processes and eliminating the need to off-load product into tubs and process it at a later time. MTES also determined that personnel should be flexible and cross-trained so that capping and packaging have sufficient demand to prevent product backup and to assure minimal work-in-process (WIP) is left on the production floor between shifts. MTES helped Orion set minimum and maximum production limits and trained the workforce to operate within queue limitations. By doing so, the company is assured of smooth product flow and minimum safety risks inherent in keeping excess WIP on the floor. Orion also employs a piece rate pay system (compensating its employees based on number of units produced per hour). MTES encouraged the company to devise an alternative compensation method, as the piece rate system inhibits continuous improvement efforts.